

# Claims

- [c1] 1. A computer-implemented method for specifying and enforcing entitlements for performance of financial transactions, the method comprising:  
providing a hierarchical entitlement structure with inheritance for specifying entitlements for performing financial transactions;  
receiving user input for defining a plurality of entitlement groups of said hierarchical entitlement structure, wherein each entitlement group has specified permissions to perform financial transactions, limits on performance of said financial transactions, and membership of each user;  
in response to a particular user request to perform a financial transaction at runtime, identifying the particular user's membership in a certain entitlement group; and  
determining whether to allow the particular user to perform the financial transaction based on permissions and limits of said hierarchical entitlement structure applicable to the particular user's performance of the financial transaction.
- [c2] 2. The method of claim 1, wherein said hierarchical enti-

tlement structure provides that a given entitlement group inherits permissions provided to its parent entitlement group in said hierarchical entitlement structure.

[c3] 3. The method of claim 2, wherein said step of defining a plurality of entitlement groups includes restricting permissions inherited by an entitlement group from its parent entitlement group in said hierarchical entitlement structure.

[c4] 4. The method of claim 1, wherein said step of defining a plurality of entitlement groups includes defining permissions to access particular objects in a financial application.

[c5] 5. The method of claim 4, wherein said step of defining a plurality of entitlement groups includes defining permissions to perform functions on said particular objects.

[c6] 6. The method of claim 4, wherein at least some of said particular objects represent bank accounts.

[c7] 7. The method of claim 1, wherein said limits comprise limitations on values of financial transactions to be performed.

[c8] 8. The method of claim 1, wherein said step of defining a plurality of entitlement groups includes defining limits

comprising a selected one of per-transaction limits and cumulative limits over a period of time.

[c9] 9. The method of claim 1, wherein said step of defining a plurality of entitlement groups includes defining permissions applying to a selected one of functions of a financial application and objects of a financial application.

[c10] 10. The method of claim 1, wherein said step of defining a plurality of entitlement groups includes defining limits applicable to individual users.

[c11] 11. The method of claim 1, wherein said step of defining a plurality of entitlement groups includes defining limits applicable collectively to members of an entitlement group.

[c12] 12. The method of claim 1, wherein said step of defining a plurality of entitlement groups includes defining limits applying collectively to a particular entitlement group and children entitlement groups of said particular entitlement group in said hierarchical entitlement structure.

[c13] 13. The method of claim 1, further comprising:  
tracking financial transactions performed for purposes of determining compliance with limits.

[c14] 14. The method of claim 13, wherein said step of track-

ing financial transactions performed includes maintaining running total values of financial transactions performed in cache for improved performance.

- [c15] 15. The method of claim 14, wherein said step of determining whether to allow the particular user to perform the financial transaction includes determining whether any limits have been exceeded based on the running total values and the value of the financial transaction requested by the particular user.
- [c16] 16. The method of claim 1, further comprising:  
maintaining permission information for entitlement groups in the hierarchical entitlement structure in cache to improve system performance.
- [c17] 17. The method of claim 16, wherein said permission information is modeled as three-tuples representing negative permissions.
- [c18] 18. The method of claim 1, wherein permissions provided to an entitlement group include permissions to administer a certain other entitlement group.
- [c19] 19. The method of claim 18, wherein permissions to administer a particular entitlement group include modifying permissions of said certain other entitlement group.

- [c20] 20. The method of claim 18, wherein said permissions to administer a certain other entitlement group are subject to limitations defined for the entitlement group having said permissions to administer.
- [c21] 21. The method of claim 1, wherein permissions provided to an entitlement group include permissions to extend a certain other entitlement group.
- [c22] 22. The method of claim 21, wherein permissions to extend a certain other entitlement group include permissions to define a child entitlement group of said particular entitlement group.
- [c23] 23. A computer-readable medium having processor-executable instructions for performing the method of claim 1.
- [c24] 24. A downloadable set of processor-executable instructions for performing the method of claim 1.